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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,119	04/14/2004	Thomas R. Tudor	65833-0012	3118
10291	7590	04/22/2005	EXAMINER	
RADER, FISHMAN & GRAUER PLLC 39533 WOODWARD AVENUE SUITE 140 BLOOMFIELD HILLS, MI 48304-0610			LAMB, BRENDA A	
			ART UNIT	PAPER NUMBER
			1734	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/709,119

Applicant(s)

TUDOR ET AL.

Examiner

Brenda A. Lamb

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2004 and 11 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/14/04 &amp; 8/11/04</u> . | 6) <input type="checkbox"/> Other: _____  |

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2, 6-8, 10-12, 16-31 and 35 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-25 and 30-50 of copending Application No. 10/336,943 (Schultz et al) in view of Krappweis.

Schultz et al claims a multiple orifice applicator for applying a fluid material to a work piece, comprising an applicator body having an inlet duct and at least one dispersing chamber in fluid communication with the inlet duct; the dispersing chamber includes outlet orifices arranged on an applicator plate. Schultz et al claims the dispersing chamber includes at least one terraced shoulder. Schultz et al claims every element of the claimed apparatus except the dispersing chamber being at least partially disposed within the applicator plate. However, it would have been obvious to arrange the dispersing chamber within the Schultz et al applicator plate since Krappweis teaches doing so for the obvious advantage of providing uniform application of coating across the width of the dispersing chamber. Thus claims 1 and 10-11 are obvious over

the above cited references. With respect to claim 8, Schultz et al claims the applicator includes at least two dispersing chambers and two independently operable valves. With respect to claim 12, Schultz et al claims the orifices comprise a backing member with a chamfered inlet. With respect to claim 2, Schultz et al claims a valve with the applicator. With respect to claim 17, Schultz et al claims a system for applying fluid material to a work piece which is comprised of the following elements: a system for applying fluid onto a work piece which is comprised of the following elements: a source of fluid material; a multiple orifice applicator in fluid communication with the source of fluid material, the multiple orifice applicator includes an applicator body having an inlet duct, at least one dispersing chamber in fluid communication with the inlet duct, an applicator plate includes a plurality of outlet orifices for dispensing the fluid material onto the work piece and a valve positioned between the inlet duct and the dispersing chamber; and a mechanism for controlling relative positioning of the multiple orifice applicator and the work piece. Schultz et al fails to claim each the at least one dispersing chamber at least partially disposed within the applicator plate. However, it would have been obvious to arrange the dispersing chamber within the Schultz et al applicator plate since Krappweis teaches doing so for the obvious advantage of providing uniform application of coating across the width of the dispersing chamber. With respect to claims 7 and 18, Schultz et al claims a plurality of orifices arranged in at least two staggered rows. With respect to claims 19-20, Schultz et al claims the mechanism causes the work piece to move relative to the applicator and the mechanism is a conveyor belt. With respect to claim 21-22, Schultz et al claims the mechanism causes the applicator to move relative to the

workpiece and the above cited mechanism is within the scope of the claims. With respect to claim 23, Schultz et al claims an electronic motion controller. With respect to claims 24-27, Schultz et al claims a remote source of fluid, a metering system for metering the fluid to the applicator, a temperature-conditioning device positioned in the manner set forth in the claims. With respect to claim 28, Schultz et al claims a source of air pressure to cause fluid to flow from the source of fluid to the applicator. With respect to claims 6 and 29, Schultz et al claims the dispersing chamber includes at least one terraced shoulder. With respect to claim 30, Schultz et al claims the applicator plate is detachable. With respect to claim 16 and 35, Schultz et al fails to claim the dispersing chamber is fully disposed in the applicator plate. However, it would have been obvious to fully disposed in the dispersing chamber within the Schultz et al applicator plate since Krappweis teaches doing so for the obvious advantage of providing uniform application of coating across the width of the dispersing chamber.

This is a provisional obviousness-type double patenting rejection.

Claims 1-2, 6-8, 10-12, 16-31 and 35 are directed to an invention not patentably distinct from claims 46-47 of commonly assigned 10/336,943. Specifically, for the reasons noted above.

Claims 1-2, 6-8, 10-12, 16-31 and 35 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/336,943 which has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C.

103(a) is based upon a presumption of future publication or patenting of the conflicting application. For the reasons noted above.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. This rejection might also be overcome by showing that the copending application is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 6, 7, 8, 11, 15-19, 29, 31 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Krappweis .

Krappweis teaches a multiple orifice applicator as shown in Figures 2-17 for applying a fluid material onto a work piece. Krappweis apparatus is comprised of the following elements: an applicator body having an inlet duct (elements 17 and 18); at least one dispersing chamber in fluid communication with the inlet duct; and an applicator plate as shown in Figures 4-17 having a plurality of outlet orifices for dispensing the fluid material onto the work piece, at least one dispersing chamber (elements 24-26) being at least partially disposed within the applicator plate such that the plurality of outlet orifices are in fluid communication with the inlet duct. Thus every element of the multiple orifice applicator of claim 1 is taught by Krappweis. With respect to claim 17, the same rejection applied to claim 1 is applied here. Krappweis teaches the inlet duct (elements 17 and 18) for supplying a fluid material, glue, to the applicator and the inlet duct is inherently connected to a supply of the fluid material in order for the glue to pass there through. Krappweis shows a roller arranged between the work piece and applicator, which controls the position of the work piece relative to the applicator and carries/conveys/moves, the work piece relative to the applicator. With respect to claim 2, Krappweis teaches a valve (elements 13-16) disposed between the inlet and

the dispersing chamber and the valve is operable to allow the fluid into at least one dispersing chamber and onto the substrate as shown in Figures 23 and 24. With respect to claims 6 and 29, Krappweis teaches the plurality of outlet orifices are positioned to create a continuous band of material on the work piece as shown in Figures 23 and 24. With respect to claims 7 and 18, Krappweis teaches the plurality of outlets are arranged in at least two staggered rows of orifices. With respect to claim 8, Krappweis teaches the applicator includes at least two dispersing chambers and at least two corresponding valves which are inherently independently operable in order to produce the pattern as shown in Figure 24. With respect to claims 11 and 31, Krappweis teaches the applicator plate is detachable. With respect to claims 16 and 35, Krappweis teaches at least dispersing chamber is fully disposed within the applicator body. With respect to claim 15, Krappweis teaches a retaining plate (elements 11-12) is secured over the applicator plate. With respect to claim 19, the mechanism, rollers, as depicted by Krappweis in Figure 23 causes the work piece to move relative to the multiple orifice applicator.

Claims 3-5, 9 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krappweis in view Ziecker et al.

Krappweis is applied for the reasons noted above. Krappweis fails to teach a seal is disposed about the dispersing chamber. However, Ziecker et al teaches arranging elastomeric seals about openings and between mated surfaces of an adhesive applicator in order to prevent leakage of adhesive there between. Ziecker et al teaches arranging elastomeric seals in grooves within the mated surfaces.



Therefore, it would have been obvious to modify the Krappweis apparatus such that an elastomeric seal is disposed about the dispersing chamber or dispersing chambers and arranged on the applicator plate which is mounted against the channel plate so as to provide a seal between the dispersing chambers since Ziecker et al arranging a seal between mating surfaces of an adhesive applicator having adhesive coating passages therein such as the applicator plate and channel plate of Krappweis for the taught advantage of doing so—prevent leakage of adhesive there between. Further, it would have been obvious given the modifications of the Krappweis apparatus with Ziecker et al elastomeric seals to arrange the seals within grooves of the applicator body since Ziecker et al teaches arranging seals in grooves of the applicator for the obvious reason to stabilize the position of the seal.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krappweis in view of Fortino.

Krappweis is applied for the reasons noted above. Krappweis fails to teach each of the plurality of orifices includes a backing member having a chamfered inlet. However, it would have been obvious to modify the Krappweis applicator such that each of the inlets of the orifices includes a backing member having a chamfered inlet since Fortino shows providing the inlet end of a backing member with a flare or chamfer in a manner set forth in the claim for the taught advantage of using a backing member within the nozzle as taught by Fortino—increase the wear resistance of the nozzle itself.

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krappweis in view of Fortino and Massey et al.

Krappweis and Fortino are applied for the reasons noted above. Krappweis fails to teach the backing member is comprised of an abrasive material such as carbide. However, it would have been obvious to modify the Krappweis apparatus such that the backing member is comprised of an abrasive material such as carbide since Massey et al teaches the constructing the insert or backing member within the nozzle of an abrasive member which includes carbide for the obvious reason of increasing the wear resistance of the nozzle (see Massey et al at column 6, lines 13-25).

Claims 20-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krappweis in view of Adams et al 3,602,193.

Krappweis is applied for the reasons noted above. Krappweis fails to teach the mechanism for controlling the relative positioning of the applicator to the work piece and the source of fluid material is a container remote from the applicator with a fluid conduit connecting the container to the applicator. However, Adams et al teaches the design of an adhesive coating apparatus for coating a pattern on the substrate as shown in Figure 1, which is comprised of a source of fluid materials; a multiple orifice applicator in fluid communication with the source of fluid; and a mechanism for controlling relative positioning of the applicator to the work piece which obviously slides up and down on standard 38, thereby reading on a mechanical slide (see column 3, lines 63-70). Adams et al teaches the source of material for the adhesive applicator is located remote from the multiple orifice applicator and a fluid conduit, which connects the container to the multiple orifice applicator. Therefore, it would have been obvious to modify the Krappweis apparatus by providing a source of material for the adhesive applicator which

is located remote from the multiple orifice applicator and a fluid conduit which connects the container to the multiple orifice applicator such as taught by Adams et al for the obvious advantage of greater control of the coating process. Further, it would have been obvious to modify Krappweis applicator by providing a mechanism to move the applicator relative to the work piece using a mechanical slide since Adams et al shows mounting its applicator in such a manner for the obvious advantage of greater control of the coating process. Thus claims 21, 22 and 24 are obvious over the above-cited references. With respect to claim 25, Adams et al teaches a metering system which includes a variable drive pump and valve in fluid communication with the fluid source and multiple orifice applicator which is obviously capable of metering the desired volumes to the applicator (see Figure 6 of Adams et al). Therefore, it would have been obvious to modify the Krappweis apparatus by providing a metering system such as shown by Adams et al for the obvious advantage greater control of the coating process. With respect to claims 26 and 27, Adams et al shows the temperature-conditioning device 122 is a temperature exchanger positioned between the source of material and the applicator. With respect to claim 20, Krappweis fails to teach the mechanism for controlling relative positioning of the applicator to the substrate is a conveyor belt. However, it would have been obvious to modify the Krappweis apparatus by substituting its means positioning of the applicator relative to the substrate with another known means for positioning of the substrate to the applicator which is a conveyor belt such as taught by Adams et al for the obvious advantage of greater support of the substrate.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krappweis in view of Adams et al 3,602,193 and Smith 5,479,352.

Krappweis and Adams et al are applied for the reasons noted above. Krappweis fails to teach an electronic motion controller as part of a mechanism for controlling relative positioning of the applicator to the work piece. However, it would have been obvious given the modifications of the Krappweis applicator with the belt conveyor as the mechanism for controlling relative positioning of the applicator to the work piece to provide an electronic motion controller such as taught by Smith for the taught advantage of using a electronic motion controller in combination with a conveyor belt for conveying substrate past an applicator - accurate placement of the pattern of the adhesive on the substrate.


Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krappweis in view of Stash et al.

Krappweis is applied for the reasons noted above. Krappweis fails to teach an air source pressure to cause the fluid to flow from source of fluid to the multiple orifice applicator. However, it would have been obvious to modify Krappweis apparatus to provide a source of air pressure in communication with the source of fluid material to cause fluid to flow from the source of fluid to the means for coating the substrate/applicator since Stash et al teaches providing a source of air pressure in communication with the source of fluid material to cause fluid to flow from the source of fluid to the means for coating the substrate for the obvious advantage of simplicity in design.

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Any inquiry concerning this communication should be directed to Brenda A. Lamb at telephone number (571) 272-1231. The examiner can normally be reached on Monday and Wednesday thru Friday with alternate Tuesdays off.

B.A. Lamb/dh  
April 6, 2005

  
BRENDA A. LAMB  
PRIMARY EXAMINER